

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A wastewater treatment system comprising:
 - (a) an anaerobic reactor;
 - (b) a first aerobic reactor;
 - (c) a filtration device;
 - (d) a desalinization device;
 - (e) a first conduit connecting the anaerobic reactor to the first aerobic reactor;
 - (f) a second conduit connecting the first aerobic reactor to the filtration device,wherein the second conduit comprises a second aerobic reactor to accept an effluent from the first aerobic reactor; and
 - (g) a third conduit connecting the filtration device to the desalinization device.
2. (Original) The wastewater treatment system of claim 1, wherein the first aerobic reactor comprises an aeration device.
3. (Cancelled) The wastewater treatment system of claim 1, wherein the second conduit comprises a second aerobic reactor.
4. (Currently amended) The wastewater treatment system of claim 3 1, wherein the second conduit comprises a valve to direct flow of liquid from the first aerobic reactor to the filtration device; or to direct flow of liquid from the first aerobic reactor to the second aerobic reactor, and then to the filtration device.
5. (Currently amended) The wastewater treatment system of claim 3 1, wherein the second aerobic reactor comprises an aeration device.

6. (Original) The wastewater treatment system of claim 1, wherein the second conduit further comprises a sludge holding member.
7. (Original) The wastewater treatment system of claim 6, wherein the sludge holding member is a sludge settling tank.
8. (Original) The wastewater treatment system of claim 6, wherein the sludge holding member comprises a sludge dewatering device.
9. (Original) The wastewater treatment system of claim 8, wherein the sludge dewatering device is selected from the group consisting of a filter press, a screw press, or a belt press.
10. (Cancelled) The wastewater treatment system of claim 6, wherein the second conduit comprises a second aerobic reactor.
11. (Currently amended) The wastewater treatment system of claim ~~10~~ 1, wherein the second conduit further comprises
 - a) a first liquid conduit, wherein the first liquid conduit connects the first aerobic reactor to the second aerobic reactor or to the filtration device; wherein liquid effluent is transferred from the first aerobic reactor to the second aerobic reactor or to the filtration device; and
 - b). a first sludge conduit wherein the first sludge conduit connects the first aerobic reactor to the sludge holding member.
12. (Original) The wastewater treatment system of claim 11, further comprising a second liquid conduit, wherein the second liquid conduit connects the sludge holding member and the first liquid conduit.
13. (Original) The wastewater treatment system of claim 11, further comprising a second sludge conduit, wherein the second sludge conduit connects the second aerobic reactor and the sludge holding member.

14. (Currently amended) The wastewater treatment system of claim ~~10~~ 1, wherein the sludge holding member comprises a sludge dewatering device.

15. (Original) The wastewater treatment system of claim 14, wherein the sludge dewatering device is selected from the group consisting of a filter press, a screw press, or a belt press.

16. (Original) The wastewater treatment system of claim 1, wherein the anaerobic reactor is an Anaerobic Biofilm Sequencing Batch Reactor (ABSBR).

17. (Original) The wastewater treatment system of claim 1, wherein the anaerobic reactor is an Anaerobic Sequencing Batch Reactor (ASBR).

18. (Original) The wastewater treatment system of claim 1, wherein the anaerobic reactor comprises an anaerobic reactor gas outlet, wherein methane gas is captured from the anaerobic reactor gas outlet.

19. (Original) The wastewater treatment system of claim 1, wherein the filtration device is selected from the group consisting of a sand filter, a microfilter, a belt filter, a pressure filter, a vacuum filter, an activated charcoal filter, and biomass filter.

20. (Original) The wastewater treatment system of claim 1, wherein the desalinization device is selected from the group consisting of reverse osmosis membrane separation units, ultrafiltration units, activated carbon filters, and ion exchange resins.

21. (Original) The wastewater treatment system of claim 1, wherein the desalinization device is a reverse osmosis membrane separation units.

22. (Original) The wastewater treatment system of claim 21, wherein the reverse osmosis membrane separation unit comprises a reverse osmosis membrane separation unit permeate outlet, and a reverse osmosis membrane separation unit concentrate outlet.

23. (Original) The wastewater treatment system of claim 1, wherein the wastewater comprises food waste products.

24. (Original) The wastewater treatment system of claim 1, wherein the wastewater comprises animal waste products.

25. (Original) The wastewater treatment system of claim 1, wherein the wastewater comprises biological fermentation wastes.

26. (Currently amended) A method of treating wastewater, the method comprising the steps of

(a) treating for a first period, a first mixture comprising wastewater under anaerobic conditions in an anaerobic reactor to form an anaerobic reactor effluent;

(b) treating for a second period, the anaerobic reactor effluent under aerobic conditions in a first aerobic reactor to form a first aerobic reactor effluent;

(c) ~~passing the first aerobic reactor effluent through a filtration device to form a filtration device effluent~~ treating for a third period, the first aerobic reactor effluent under aerobic conditions in a second aerobic reactor to form a second aerobic reactor effluent;

(d) passing the second aerobic reactor effluent through a filtration device to form a filtration device effluent; and

(d) passing the filtration device effluent through a desalinization device to form a desalinization device effluent.

27. (Cancelled) The method of claim 26, further comprising the step of incubating the first aerobic reactor effluent for a third period in a second aerobic reactor to form a second aerobic reactor effluent; and passing the second aerobic reactor effluent through the filtration device.

28. (Original) The method of claim 26, further comprising the step of removing sludge by collecting sludge in a sludge holding tank.

29. (Original) The method of claim 26, further comprising the step of removing sludge using a sludge dewatering device.

30. (Original) The method of claim 26, wherein the wastewater comprises food waste products.

31. (Original) The method of claim 26, wherein the wastewater comprises animal waste products.

32. (Original) The method of claim 26, wherein the wastewater comprises biological fermentation wastes.

33. (Original) The method of claim 26, wherein the anaerobic reactor is an Anaerobic Biofilm Sequencing Batch Reactor (ABSBR).

34. (Original) The method of claim 26, wherein the anaerobic reactor is an Anaerobic Sequencing Batch Reactor (ASBR).

35. (Original) The method of claim 26, wherein the anaerobic reactor comprises an anaerobic reactor gas outlet and methane gas is captured from the anaerobic reactor gas outlet.

36. (Original) The method of claim 26, wherein the filtration device is selected from the group consisting of a sand filter, a microfilter, a belt filter, a pressure filter, a vacuum filter, an activated charcoal filter, and biomass filter.

37. (Original) The method of claim 26, wherein the desalinization device is selected from the group consisting of a reverse osmosis membrane separation unit, an ultrafiltration unit, an activated carbon filter, and an ion exchange resin.

38. (Original) The method of claim 26, wherein the desalinization device is a reverse osmosis membrane separation unit.

39. (Currently amended) The method of claim 38, further comprising the step of passing the filtration device effluent through the reverse osmosis separation unit to form a reverse osmosis concentrate and a reverse osmosis permeate, wherein the reverse osmosis permeate is reclaimed water, and the reverse osmosis ~~permeate~~ concentrate is concentrated liquid fertilizer.

40. (Original) The method of claim 26, further comprising the step of adding flocculent chemicals.